

Road Repair Works Over the Existing Asphalt Road & Other Allied works at Mahindra World City, Chengalpattu

Volume – III

Tender schedule

Mahindra WORLD CITY

Mahindra World City Developers Limited,
Administrative Block, Central Avenue,
Mahindra World City, Chengalpet-603004,
Kanchipuram (district), Tamil Nadu

Abstract

Sl no	Description	Amount
1	Seal Coat Works	
2	Patch Work / Pothole	
3	Road Marking (Thermoplast)	
4	Studs	
5	New Speed Bump	
	Total (Excl Tax)	

Seal Coat Works :

Sl no	Description	Unit	Qty	Rate	Amount
A	Seal Coat Works				
A1	<p>Pavement Preparation: Scarifying the road pavement for surface preparation by mechanical means. The rate includes, scarify, debris removal as per EIC - (This item is to be executed wherever required with prior approval from MWCDL representative)</p>	Sq.m	1,000		
A2	<p>Pavement milling works in proposed Seal coat works</p> <p>The road surface is to be milled for the Maximum depth of 40mm from the existing finished level. The finished surface is free from gouges, grooves, ridges and in accordance with the surface tolerance requirements as directed. Remove milled material, as specified, immediately after the milling operations to facilitate traffic control. Control the rate of milling to avoid tearing of the mat, resulting in chunky and non-uniformly milled material. Separate oversize and chunky milled material as directed. The milled surface is to be properly cleaned and free from any loose particle and dust. Proper signage board with reflective stickers is to be placed in the road. The Contractor shall use water as necessary to minimize airborne dust.</p> <p>The milled surface is to be disposed as specified by MWCDL. The rate is inclusive of machinery, manpower, carting, loading, unloading, transporting, dumping and levelling the surface.</p>	Sq.m	15,300		
A3	<p>Providing and applying Tack Coat with Emulsion (spread factor : 2 ~ 2.5 kg per 10 sqm) over the existing road surface / scarified surface, including heating the bitumen, spraying the bitumen with mechanically operated spray unit, including prior</p>	Sq.m	15,300		

Sl no	Description	Unit	Qty	Rate	Amount
	cleaning and preparing the surface to receive the tack coat, the works shall be complete as per specification, drawing and as directed by the Engineer / EIC				
A4	Providing and laying evenly graded Bituminous concrete of 40mm thick as per Clause 512 of MORTH specification using 60/70 grade 5% of bitumen with specified graded stone chipping using mechanical means including hot mix plant of appropriate capacity, transporting and laying with paver finisher fitted with electronic sensor device to the required level and grade rolling with smooth wheeled tandem rollers of 8-10 M.T. static weight including all material, labour, machinery and covering all pot holes & patch works as directed by EIC with all leads and lifts etc. complete as given below	Sq.m	15,300		
	(Note : No separate measurement/payment shall be made for patch works coming under seal coat areas.				
	TOTAL (Excluding Tax)				

Patch Work / Pothole

Sl no	Description	Unit	Qty	Rate	Amount
B	Patch work / Pot holes (Road cut areas) Multiple locations				
B1	Excavation & Road Cutting for the Rectification works. The work includes, road cutting by mechanical or manual, carting, transportation, loading, unloading, cleaning and disposal off from MWCC limits, etc to complete the works. (Upto depth of 500mm)	Cum	900		
B2	Granular Subbase Layer 200mm Thick				
	Providing & Laying with Granular Subbase Layer 200mm thick, consolidated thickness, with aggregate in layers and with proper compaction to achieve 98% proctor density at optimum moisture content including all lead, the works shall be complete as per specification, drawing and as directed by the Engineer.	Cum	600		
B3	Wet Mix Macadam (WMM)- 200mm thick in 1 Layer				
	Providing, laying, spreading and compacting in 200mm thick in one layer of Wet Mix Macadam to be laid with mechanical paver conforming 400-10 for material , 400-11 conforming grading and Specification as per MORTH 406 including adding periodic required quantity of water and consolidating with mechanically, 10MT vibratory Power Rollers to required line, level, alignment, grade camber and slope etc. the works shall be complete as per specification, drawing and as directed by the Engineer.	Cum	600		
B4	Prime Coat				
	Providing and applying Prime Coat with Emulsion (spread factor : 9 ~ 12 kg per 10 sqm) over Wet Mix Macadam (WMM), Wet Mix Macadam measured separately, including heating the bitumen, spraying the bitumen with mechanically operated spray unit, including prior cleaning and preparing the surface to receive the tack coat, the works shall be complete as per specification, drawing and as directed by the Engineer	Sqm	3000		

Sl no	Description	Unit	Qty	Rate	Amount
B5	Tack Coat				
	Providing and applying Tack Coat with Emulsion (spread factor : 2 ~ 2.5 kg per 10 sqm) over Prime Coat, including heating the bitumen, spraying the bitumen with mechanically operated spray unit, including prior cleaning and preparing the surface to receive the tack coat, the works shall be complete as per specification, drawing and as directed by the Engineer.	Sqm	3000		
B6	Dense Bituminous Macadam (DBM) - 50mm Thick - Layer				
	Providing and Laying Dense Bituminous Macadam (DBM) 50mm thick, consolidated thickness, using aggregates conforming to grading as per table 500-9 and binder content and other requirements as per Table 500-10 and adopting suitable job mix formula, 25mm and standard down size graded metal premixed with 60/70 grade hot bitumen @ 90kg/cu.m of metal mix at Central Hot Mix plant to the required temperature, conveying to paver, and laying the mix to the required temperature with uniform thickness, grades, camber and cross section using Sensor paver finisher and consolidation by vibratory roller the works shall be carried out as per "MORTH" specification as applicable also the works shall be complete as per specification, drawing and as directed by the Engineer.	Sqm	3000		
B7	Tack Coat				
	Providing and applying Tack Coat with Emulsion (spread factor : 2 ~ 2.5 kg per 10 sqm) over Dense Bituminous Macadam (DBM), including heating the bitumen, spraying the bitumen with mechanically operated spray unit, including prior cleaning and preparing the surface to receive the tack coat, the works shall be complete as per specification, drawing and as directed by the Engineer / EIC	Sqm	3000		

Sl no	Description	Unit	Qty	Rate	Amount
B8	Bituminous Concrete (BC) - 40mm Thick - Layer				
	Providing and Laying Bituminous concrete (BC) 40mm thick, consolidated thickness, using aggregates confirming to grading as per table 500-9 and binder content and other requirements as per Table 500-10 and adopting suitable job mix formula, 12mm and standard down size graded metal premixed with 60/70 grade hot bitumen @ 110kg/cum of metal mix at Central Hot Mix plant to the required temperature, conveying to paver, and laying the mix to the required temperature with uniform thickness, grades, camber and cross section using mechanical paver finisher and consolidation by Tandem roller. Final finish of BC to be done with Sensor Paver Pneumatic Tyre Roller. The works and level tolerance limit shall be as per "MORTH" specification as applicable and also the works shall be complete as per specification, drawing and as directed by the Engineer / EIC. Required tests are to be carried out as directed by the Engineer	Sqm	3000		
B9	Laying and spreading available soil in the sub-grade on a prepared surface, pulverising, mixing the spread soil in place with rotavator with 3% cement with motor grader and compacting with the road roller to the desired density to form a layer of improved sub grade	Cum	300		
TOTAL (Excluding Tax)					

Other Allied Works :

S.NO	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
1	Road line marking - (Multiple locations)				
	Providing and applying for Hot Thermoplastic compound 2.5mm thick including reflectorising glass beads 250gm/sqm area, Thickness 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be in level, uniform and free from streaks and holes etc., complete (as per MORT AMP: H specification No.803) Colour : White / Yellow	SQM	1150		
2	Studs - (Multiple Locations)				
	Providing and fixing reflective pavement marker (RPM) or road surface for land marking and delineation for night time visibility, with plastic body of RPM / road studs moulded from ASA (Acrylic Strene Acrylonitrile) or HIPS(High Impact Polystyrene). The marker shall support a load of 13635Kg. tested in accordance with ASTM D 4280. Reflective panels shall consist of number of lenses containing single or dual prismatic cube capable of providing total internal reflection of the light entering the lens face. Lenses shall be moulded of methyl / methacrylate conforming to ASTM D 788 or equivalent etc., (As per Technical specification of NHAI Clause a B) Dimension: 20mm H x 130mm 105mm Reflective area: 13 sq.cm, Bi-directional Colours: Yellow, Red , White	Nos	1500		
C	Speed Bump: (3 locations - 15mts each) Demolition of existing damaged Concrete speed bump and disposal of debris as per client requirement. Providing and laying of Speed Bump over the existing Bitumen surface. The scope of work is scrapping the existing surface and laying of Bituminous Speed bump as per the profile / drawing & finishing the work includes all material, labour and machinery with all leads & lifts etc., Proper safety precautions is to be made like signages, barricading, road diversion etc.,	Rmt	45		
Total (Excl Tax)					